

Application No. 10/055,799

Filed: October 25, 2001

TC Art Unit: 1714

Confirmation No.: 7498

AMENDMENT TO THE CLAIMS

1 - 42. (Cancelled)

43. (Currently Amended) A composition for preventing oxidative degradation of a substance, said composition comprising:

an effective amount of an anti-corrosion agent, said agent comprising a 2,4-trans, trans-hexadiene moiety; and

a material capable of acting in conjunction with said anti-corrosion agent to prevent said oxidative degradation, wherein said material is selected from the group consisting of a polar liquid, a non-polar liquid, a viscous material, an organic liquid, a polymeric material and a petroleum-based substance and The composition of claim 32, wherein said anti-corrosion agent composition is packaged for delayed release.

44. (Currently Amended) The composition of claim 43, wherein said ~~anti-corrosion agent~~ composition is encapsulated.

45 - 50. (Cancelled)

51. (Currently Amended) A method for preventing oxidative degradation of a substance, said method comprising the steps of:

providing a composition comprising:

an effective amount of an anti-corrosion agent, said agent comprising a 2,4-trans, trans-hexadiene moiety; and

a material capable of acting in conjunction with said anti-corrosion agent to prevent said oxidative degradation, wherein said material is selected from the group consisting of a polar liquid, a non-polar liquid, a viscous material, an

Application No. 10/055,799

Filed: October 25, 2001

TC Art Unit: 1714

Confirmation No.: 7498

organic liquid, a polymeric material and a petroleum-based substance; and
applying said composition to a preparation of said substance
~~The method of claim 48,~~ wherein said substance is a plastic material or a paper material.

52 - 53. (Cancelled)

54. (Currently Amended) A method for preventing oxidative degradation of a substance, said method comprising the steps of:

providing a composition comprising:

an effective amount of an anti-corrosion agent, said agent comprising a 2,4-trans, trans-hexadiene moiety; and

a material capable of acting in conjunction with said anti-corrosion agent to prevent said oxidative degradation, wherein said material is selected from the group consisting of a polar liquid, a non-polar liquid, a viscous material, an organic liquid, a polymeric material and a petroleum-based substance; and

applying said composition to a preparation of said substance
~~The method of claim 48,~~ wherein said applying step comprises using said composition as a lubricant for a surface of a ~~substance~~ metal.

55. (Cancelled)

56. (Currently Amended) A method for preventing oxidative degradation of a substance, said method comprising the steps of:

providing a composition comprising:

Application No. 10/055,799

Filed: October 25, 2001

TC Art Unit: 1714

Confirmation No.: 7498

an effective amount of an anti-corrosion agent, said agent comprising a 2,4-trans, trans-hexadiene moiety; and
a material capable of acting in conjunction with said anti-corrosion agent to prevent said oxidative degradation, wherein said material is selected from the group consisting of a polar liquid, a non-polar liquid, a viscous material, an organic liquid, a polymeric material and a petroleum-based substance; and
applying said composition to a preparation of said substance
~~The method of claim 48,~~ wherein said applying step comprises using said composition as a pump oil or brake fluid.

57. (Cancelled)

58. (Previously Presented) A method for preventing oxidative corrosion of a metal, said method comprising the steps of:

providing a metal or a device containing a metal wherein said metal is susceptible to oxidative corrosion;

providing an anti-corrosion composition, said composition comprising an effective amount of an anti-corrosion agent, said agent comprising a 2,4-trans, trans-hexadiene moiety, said composition further comprising a material capable of forming a moisture retentive barrier over a surface of said metal, wherein said anti-corrosion agent and said material capable of forming a moisture retentive barrier over a surface of said metal are both provided in powdered form to produce a powdered composition; and

applying said powdered composition to a surface of said metal by powder metallurgy processing, wherein said composition forms an anti-corrosive, moisture retentive barrier over said surface.

Application No. 10/055,799
Filed: October 25, 2001
TC Art Unit: 1714
Confirmation No.: 7498

59. (Previously Presented) A method for preventing oxidative corrosion of a metal, said method comprising the steps of:

providing a metal or a device containing a metal wherein said metal is susceptible to oxidative corrosion;

providing an anti-corrosion composition, said composition comprising an effective amount of an anti-corrosion agent, said agent comprising a 2,4-trans, trans-hexadiene moiety, said composition further comprising a material capable of forming a moisture retentive barrier over a surface of said metal; and
applying said composition to a surface of said metal, wherein said anti-corrosion agent in said composition is packaged for delayed release to form an anti-corrosive, moisture retentive barrier over said surface.

60. (Previously Presented) The method of claim 59, wherein said anti-corrosion agent is encapsulated.

61. (Previously Presented) A method for preventing oxidative corrosion of a metal, said method comprising the steps of:

providing a metal or a device containing a metal wherein said metal is susceptible to oxidative corrosion;

providing an anti-corrosion composition, said composition comprising an effective amount of an anti-corrosion agent, said agent comprising a 2,4-trans, trans-hexadiene moiety, said composition further comprising a material capable of forming a moisture retentive barrier over a surface of said metal;

applying said composition to a surface of said metal, wherein said composition forms an anti-corrosive, moisture retentive barrier over said surface; and

Application No. 10/055,799
Filed: October 25, 2001
TC Art Unit: 1714
Confirmation No.: 7498

applying a further coating layer over said surface.

62. (Previously Presented) The method of claim 61, wherein said further coating layer is applied by a process selected from the group consisting of painting, electro-plating and electro-polishing.

63. (Previously Presented) A method for preventing oxidative corrosion of a metal, said method comprising the steps of:

providing a metal or a device containing a metal wherein said metal is susceptible to oxidative corrosion;

providing an anti-corrosion composition, said composition comprising an effective amount of an anti-corrosion agent, said agent comprising a 2,4-trans, trans-hexadiene moiety, said composition further comprising a material capable of forming a moisture retentive barrier over a surface of said metal; and

using said composition as a pump oil or brake fluid to apply said composition to a surface of said metal, wherein said composition forms an anti-corrosive, moisture retentive barrier over said surface.

64. (Cancelled)

65. (Previously Presented) A composition for preventing oxidative corrosion of a metal, said composition comprising:

an effective amount of an anti-corrosion agent, said agent comprising a 2,4-trans, trans-hexadiene moiety; and

a material capable of forming a moisture retentive barrier over a surface of said metal, wherein said composition is powdered

Application No. 10/055,799
Filed: October 25, 2001
TC Art Unit: 1714
Confirmation No.: 7498

in final form and is capable of being applied to a surface of said metal by powder metallurgy processing.

66. (Previously Presented) A composition for preventing oxidative corrosion of a metal, said composition comprising:

an effective amount of an anti-corrosion agent packaged for delayed release, said agent comprising a 2,4-trans, trans-hexadiene moiety; and

a material capable of forming a moisture retentive barrier over a surface of said metal.

67. (Previously Presented) The composition of claim 66, wherein said anti-corrosion agent is encapsulated.

68. (Previously Presented) A composition for preventing oxidative degradation of a substance, said composition comprising:

an effective amount of an anti-corrosion agent, said agent comprising a 2,4-trans, trans-hexadiene moiety; and

a polymeric material capable of acting in conjunction with said anti-corrosion agent to prevent said oxidative degradation, wherein said polymeric material is a glycol.

69. (Previously Presented) A composition for preventing oxidative degradation of a substance, said composition comprising:

an effective amount of an anti-corrosion agent, said agent comprising a 2,4-trans, trans-hexadiene moiety; and

a polymeric material capable of acting in conjunction with said anti-corrosion agent to prevent said oxidative degradation,

Application No. 10/055,799
Filed: October 25, 2001
TC Art Unit: 1714
Confirmation No.: 7498

wherein said polymeric material is a homo- or heteroglycan polymer.

70. (Previously Presented) The composition of claim 69, wherein said homo- or heteroglycan polymer is cellulose.

71. (Previously Presented) The composition of claim 69, wherein said homo- or heteroglycan polymer is a derivatized cellulose.

72. (Previously Presented) The composition of claim 71, wherein said derivatized cellulose is an hydroxyethylated or carboxymethylated starch or cellulose.

73. (Previously Presented) The composition of claim 69, wherein said 2,4-trans, trans-hexadiene moiety is potassium sorbate.

74. (Previously Presented) The composition of claim 68 or claim 69, wherein said anti-corrosion agent is packaged for delayed release.

75. (Previously Presented) The composition of claim 74, wherein said anti-corrosion agent is encapsulated.

76. (Previously Presented) The composition of claim 68 or claim 69, wherein said composition further comprises any one of an alcohol, a glycol, an antioxidant or an antimicrobial material.

Application No. 10/055,799
Filed: October 25, 2001
TC Art Unit: 1714
Confirmation No.: 7498

77. (Previously Presented) A method for preventing oxidative degradation of a substance, said method comprising the steps of:
providing the composition of claim 68 or claim 69; and
applying said composition to a preparation of said substance.
78. (Previously Presented) The method of claim 77, wherein said applying step comprises mixing said composition with a preparation of said substance.
79. (Previously Presented) The method of claim 77, wherein said substance is an agricultural product or a wood product.
80. (Previously Presented) The method of claim 77, wherein said substance is a plastic material or a paper material.
81. (Previously Presented) The method of claim 78, wherein said substance is a grain.
82. (Previously Presented) The method of claim 77, said method further comprising, following said applying step, the step of applying a further coating layer over said substance.
83. (Previously Presented) The method of claim 77, wherein said applying step comprises using said composition as a lubricant for a surface of a substance.
84. (Previously Presented) The method of claim 83, wherein said substance is a metal.

Application No. 10/055,799

Filed: October 25, 2001

TC Art Unit: 1714

Confirmation No.: 7498

85. (Previously Presented) The method of claim 77, wherein said applying step comprises using said composition as a pump oil or brake fluid.

86 - 88. (Cancelled)

89. (Currently Amended) A method for preventing oxidative degradation of a substance, said method comprising the steps of:

providing a composition comprising:

an effective amount of an anti-corrosion agent, said agent comprising a 2,4-trans, trans-hexadiene moiety; and

a material capable of acting in conjunction with said anti-corrosion agent to prevent said oxidative degradation, wherein said material is selected from the group consisting of a polar liquid, a non-polar liquid, a viscous material, an organic liquid, a polymeric material and a petroleum-based substance~~the composition of claim 32;~~

applying said composition to a preparation of said substance;

and

applying a further coating layer over said substance.

90. (Currently Amended) A method for preventing oxidative degradation of a substance, said method comprising the steps of:

providing a composition comprising:

an effective amount of an anti-corrosion agent, said agent comprising a 2,4-trans, trans-hexadiene moiety; and

a material capable of acting in conjunction with said anti-corrosion agent to prevent said oxidative degradation, wherein said material is selected from the group consisting of a polar liquid, a non-polar liquid, a viscous material, an

Application No. 10/055,799
Filed: October 25, 2001
TC Art Unit: 1714
Confirmation No.: 7498

organic liquid, a polymeric material and a petroleum-based substance~~the composition of claim 32~~; and
using said composition as a lubricant for a surface of a substance.

91. (Previously Presented) The method of claim 90, wherein said substance is a metal.

92. (Currently Amended) A method for preventing oxidative degradation of a substance, said method comprising the steps of:
providing a composition comprising:
an effective amount of an anti-corrosion agent, said agent comprising a 2,4-trans, trans-hexadiene moiety; and
a material capable of acting in conjunction with said anti-corrosion agent to prevent said oxidative degradation, wherein said material is selected from the group consisting of a polar liquid, a non-polar liquid, a viscous material, an organic liquid, a polymeric material and a petroleum-based substance~~the composition of claim 32~~; and
using said composition as a pump oil or brake fluid ~~within~~
within said substance.